What is claimed is:

1.   A mobile communicator comprising:

     a search receiver to search for a base station using a search window size that adapts over time based on a changing channel condition between the base station and the mobile communicator.

2.   The mobile communicator of claim 1, wherein:

     said search receiver uses a first search window size to search for the base station during normal operation and changes to a second, larger search window size to search for the base station when received energy is detected outside of said first search window size for the base station.

3.   The mobile communicator of claim 2, wherein:

     said first search window size is selected to encompass a majority of possible delay spread conditions between the base station and the mobile communicator.

4.   The mobile communicator of claim 1, wherein said search receiver includes:

     a searcher having a variable size search window; and

     a search window size controller to control the search window size of the searcher, said search window size controller to occasionally change the search window size of the searcher to a full search window size for use in determining a present channel condition between the base station and the mobile communicator.

5.   The mobile communicator of claim 4, wherein:

     said search window size controller determines a subsequent search window size for the searcher based on the present channel condition.

6.   The mobile communicator of claim 4, wherein:

     said full search window size is related to an expected worst case delay spread in the channel between the base station and the mobile communicator.

1 7.   The mobile communicator of claim 4, wherein:

2   said search window size controller estimates a delay spread of the channel

3 between the base station and the mobile communicator and determines a subsequent

4 search window size for the searcher based on the estimated delay spread.

1 8.   The mobile communicator of claim 7, wherein:

2   said search window size controller determines a smallest search window size

3 that encompasses all significant paths within the estimated delay spread of the channel.

1 9.   The mobile communicator of claim 7, wherein:

2   said search window size controller selects the subsequent search window size

3 from a plurality of predetermined search window sizes.

1 10.   The mobile communicator of claim 4, comprising:

2   a quality measure unit to determine a quality measure for the base station using

3 an output of the searcher.

1 11.   The mobile communicator of claim 1, wherein:

2   said search receiver searches for multiple base stations using corresponding

3 search window sizes that adapt over time based on changing channel condition between

4 each corresponding base station and the mobile communicator.

1 12.   A method for searching for a base station from a mobile communicator,

2 comprising:

3   searching for the base station using a search window; and

4   adapting a size of the search window over time based on a changing channel

5 condition between the base station and the mobile communicator.

1   13.   The method of claim 12, wherein:

2   adapting a size of the search window includes:

3   occasionally searching for the base station using a full search window

4   size; and

5   changing the search window size based on a result of one or more full

6   search window searches.

1   14.   The method of claim 12, wherein:

2   adapting a size of the search window includes:

3   estimating a delay spread of a channel between the base station and the

4   mobile communicator; and

5   selecting a smallest search window size that encompasses the estimated

6   delay spread.

1   15.   The method of claim 12, wherein:

2   adapting a size of the search window includes:

3   determining whether receive energy has been detected outside a first

4   search window size; and

5   changing the size of the search window to the first search window size

6   when receive energy has not been detected outside said first search window

7   size.

1   16.   A method for searching for a base station from a mobile communicator,

2   comprising:

3   searching for the base station using a first search window size;

4   occasionally checking for significant received energy outside of said first search

5   window size for the base station; and

6   searching for the base station for a predetermined period using a second search

7   window size that is greater than said first search window size when significant received

8   energy is detected outside of said first search window size during occasionally

9   checking.

1   17.   The method of claim 16, wherein:

2   occasionally checking for significant received energy outside of said first search

3   window size includes searching for the base station using a full search window size that

4   is greater than said first search window size.

1   18.   The method of claim 17, wherein:

2   said first search window size is a size that is expected to encompass a majority

3   of possible delay spread conditions in a channel between the base station and the

4   mobile communicator; and

5   said full search window size is a size that is expected to encompass a worst case

6   delay spread condition in the channel between the base station and the mobile

7   communicator.

1   19.   The method of claim 17, wherein:

2   said second search window size is equal to said full search window size.

1   20.   The method of claim 17, wherein:

2   said second search window size is less than or equal to said full search window

3   size.

1   21.   The method of claim 16, wherein:

2   occasionally checking includes checking at regular intervals.

1   22.   The method of claim 16, wherein:

2   occasionally checking includes estimating a delay spread for the channel

3   between the base station and the mobile communicator; and

4   said second search window size is determined based upon the estimated delay

5   spread.

1   23.   A mobile communicator that is programmed to search for one or more base

2   stations using the method of claim 16.

1   24.   A method for searching for a base station from a mobile communicator,

2   comprising:

3   first searching for the base station using a large search window size;

4   determining a new search window size to search for the base station based on a

5   result of said first searching; and

6   second searching for the base station using the new search window size.

1   25.   The method of claim 24, wherein:

2   second searching includes searching for the base station using the new search

3   window size for a first time duration.

1   26.   The method of claim 25, further comprising:

2   repeating first searching, determining, and second searching after said first time

3   duration has elapsed.

1   27.   The method of claim 26, further comprising:

2   adapting a length of said first time duration over time based on a predetermined

3   criterion.

1   28.   The method of claim 24, wherein:

2   determining a new search window size includes selecting one of a plurality of

3   predetermined search window sizes.

1   29.   The method of claim 24, wherein:

2   determining a new search window size includes determining a size that will

3   encompass a delay spread associated with the base station.

1   30.   The method of claim 24, wherein:

2   determining a new search window size includes:

3   determining whether significant received energy was detected during

4   said first searching that was outside of a first search window, said first search

5   window having a size that is smaller than said large search window size; and

6   setting the new search window size equal to the size of the first search

7   window when significant received energy was not detected outside of said first

8   search window.

1   31.   A mobile communicator that is programmed to search for one or more base

2   stations using the method of claim 24.